

Request for Information Under 37 C.F.R. § 1.105

Applicants have been requested by the Examiner under 37 C.F.R. § 1.105 to provide information the Examiner has determined is reasonably necessary to the examination of this application.

With respect to the Information Requirement, Applicants Respectfully Submit:

- 1) The information is either unknown or not readily available;
- 2) The information is either unknown or not readily available;
- 3) Comments on information of record which raise a question of whether applicant derived the invention from another under 35 U.S.C. 102(f):

In the Information Requirement dated May 22, 2006 in the above-referenced case, the Examiner stated:

Examiner contends that the workflow engines and generic objects based upon a reference model promulgated by the Workflow Management Coalition required for enabling the invention as recited constitute prior art admittance. If these workflow engines provide to be required for enabling the invention as recited are in Applicant's admitted prior art, a product using these workflow engines or providing an alternative solution may still constitute prior art.

To make the record clear, the Examiner is requiring specific information that may be used to delineate the invention and the commercially available Vignette products, specifically the IBM MQ series workflow engine, BEA Process Integrator workflow engine and Vignette PWS workflow engine.

Applicants believe that this statement ties into Information Request 3 and therefore would like to clarify that prior to the present invention there were commercially available workflow engines such as the IBM MQ series workflow engine and the BEA Process Integrator workflow engine, available from IBM and BEA respectively, each of which had its own API. There were various other workflow engines available from other companies that also had their own APIs. Additionally, it is Applicants' understanding that the Business Process Management Group, Object Management Group and Workflow Management Coalition worked to produce a

reference models to describe workflow functionality and standardized API to replace the various proprietary APIs used in each product. The standard workflow API was not, to the knowledge of Applicants, adopted in the industry and various workflow engines retained their own APIs. Thus, while the reference models describe abstract notions of cooperation and integration of distributed workflow and business process systems, there was, at the time of invention, no software architecture that permitted a configurable integration of disparate workflow/business process systems for a single application (i.e., because of the lack of standards adherence or adoption, an application wishing to exploit a workflow or business process system must adopt a single vendor-specific implementation). The Applicants have included several documents in the accompanying IDS from the Workflow Management Coalition Web Site as a courtesy to the Examiner to provide a better understanding of the Workflow Management Coalition reference model.

The problem of heterogeneous workflow engine APIs presents very real problems for companies. Vignette has acquired several companies that use different workflow engines. In order to integrate workflow management across the various acquired entities, Vignette would either have to replace the various workflow engines so that all the workflow engines used are the same or write custom applications to utilize the APIs of the heterogeneous workflow engines. Both these solutions are time intensive and inefficient. Moreover, presumably other companies employing different workflow engines will face the same challenges. Accordingly, Vignette worked to develop an efficient solution for an extensible architecture for workflow engines.

As recited in Claim 1, an embodiment of Vignette's solution comprises:

- a public API for a set of heterogeneous workflow engines, wherein the API comprises a set of generic objects;
- a plurality of adapters, each adapter configured to interface with a workflow engine API, wherein each workflow engine API is associated with an underlying workflow engine from the set of heterogeneous workflow engines;
- wherein each adapter is operable to map said set of generic objects to a set of native objects for a corresponding underlying workflow engine.

As discussed in the Specification, the public API can include objects based on the Workflow Management Coalition Reference Model, but could include other objects. See Specification 10036-0039. The generic objects are mapped to the workflow engine specific APIs by a set of adapters. Thus, applications only have to be programmed to invoke objects of the public API to utilize heterogeneous workflow engines (i.e., workflow engines with different

APIs) as objects of the public API are mapped to the underlying workflow engine APIs by the adapters. As new workflow engines are acquired (e.g., through purchasing a company using another workflow engine), a new adapter can be installed to map the generic objects of the public API to the API of the new workflow engine. The applications utilizing the workflow engines through the public API would require little or no reconfiguration to be able to use additional workflow engines.

Thus, while the Workflow Management Coalition proposed a reference model for workflow engines, this model, to the knowledge of Applicants, was never adopted for a standardized API for all workflow engines. Because the APIs were not standardized, and in any event as a number of heterogeneous workflow APIs remain as encountered by Vignette, the Applicants invented a way to allow the heterogeneous workflow engines to be used. The features of utilizing a public API for a set of heterogeneous workflow engines and a plurality of adapters that map the generic objects of the public API to a set of native objects for corresponding underlying workflow engines did not exist in either the heterogeneous APIs of existing products or the reference model proposed by the Workflow Management Coalition.

4) The information is either unknown or not readily available.

If the Examiner believes that Applicants did not understand any of the requests for information, Applicant respectfully requests that the Examiner provide any necessary clarification to Applicants.

Interview Summary

On September 12, 2006, John Adair, Paul Loomis and Examiner Wu held a telephonic interview to discuss the outstanding Information Requirement. No specific claims were discussed. Messrs. Adair, Loomis and Wu discussed that even in light of the Workflow Management Coalition reference model, many workflow engines had different APIs at the time of invention. Because there was no standard API, Vignette encountered the problem of having to have applications communicate with different APIs from workflow engines inherited from other entities (e.g., through purchase). Because the APIs were heterogeneous, Vignette would have to i) select a specific workflow engine and replace all the other workflow engines ii) develop separate applications to communicate with each workflow engine, or iii) develop a new software architecture to efficiently extend application functionality to new workflow engines.

The present invention provides systems and methods that allow the use of heterogeneous workflow engines by providing an extensible software architecture. Applicants agreed to provide additional information related to the Workflow Management Coalition standard.

Applicants have now made an earnest attempt to place this case in condition for allowance. Other than as explicitly set forth above, this reply does not include an acquiescence to statements, assertions, assumptions, conclusions, or any combination thereof in the Office Action. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully requests full allowance of all Claims. The Examiner is invited to telephone the undersigned at the number listed below for prompt action in the event any issues remain.

The Director of the U.S. Patent and Trademark Office is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 50-3183 of Sprinkle IP Law Group.

Respectfully submitted,

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